

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraphs beginning on page 1, lines 1, 8 and 18 with the following amended paragraphs:

The present invention relates to a projection type display unit, for example, a liquid crystal projection type display unit, a projection type display device and the like, that projects a reflection on a screen with the use of a light [[bulb]] valve such as liquid crystal panels.

Projection type display units include a liquid crystal projection type display unit, a projection type display device and the like in which light from a light source is irradiated on a light [[bulb]] valve such as liquid crystal panels, the light [[bulb]] valve performs light intensity modulation (also, called spatial light modulation) for transforming into intensity (concentration) of light every pixel, and an optical image is formed, enlarged, and projected onto a screen or the like.

This type of projection type display unit includes therein a plurality of heat generating sources (for example, a lamp of a light source, a light [[bulb]] valve, an electric power source for driving the lamp, etc.) and optical parts are shortened in service life due to heat generated from these heat generating sources. Therefore, for example, in the case where the liquid crystal panels are used as a light [[bulb]] valve, liquid crystal panels must be kept at temperature of 70°C or lower. Hereupon, such projection type display unit generally comprises cooling means, by which heat generated from the heat generating sources is exhausted outside the unit.

Please replace the paragraph beginning on page 2, line 6 with the following amended paragraph:

Conventionally, JP-A-2000-81673 discloses the construction of cooling means for this type of projection type display unit, in which cooling wind paths for cooling a light valve, an electric power source and a light source in the projection type display unit are unified whereby air intake ports and air exhaust ports, respectively, are made in smaller in number than fans used therein to intend to reduce noise leakage outside the projection type display unit from the air intake ports and the air exhaust ports.

Please amend the paragraph beginning on page 2, line27 with the following amended paragraph:

With the conventional art disclosed in JP-A-2000-81673, however, since cooling wind paths are unified to constitute a single one, heat generating parts, for example, the light valve, the electric power source, the light source, etc. arranged in the cooling wind path from a low-temperature side on sides of the air intake ports to a high-temperature side on sides of the air exhaust ports are restricted in arrangement and it is extremely difficult to have temperatures of respective parts, such as the light valve, the electric power source, the light source, etc. including appropriate margins conformed to the parts. Also, since the light valve, the electric power source and the light source are arranged in the single cooling wind path that is not independent, the electric power source disposed close to the light source is affected by heat of the light source. Further, since the light source is cooled by means of the wind having become hot after cooled the electric power source, a lot of fan air volume is needed to cool the light valve, the electric power source, the light source, etc. and it is difficult to reduce the rotational frequencies of the fans and to reduce noise accompanying the rotation of the fans. Also, since one of the fans is provided close to an air exhaust port opened to a housing, noise

generated from the fan is released from the air exhaust port without damping, and so it is difficult to reduce noise.

Please amend the paragraphs beginning on page 4, lines 16 and 22 with the following amended paragraphs:

The invention has been thought of in view of these matters, and has its object to provide a projection type display unit, in which noise can be reduced by devising an arrangement of heat generating parts such as a light [[bulb]] valve, an electric power source, a light source, etc. and an arrangement of fans.

In order to attain the object, the invention provides a projection type display unit comprising a light source unit, a first cooling fan that cools the light source unit, a light [[bulb]] valve that modulates beams of light from the light source unit, a second cooling fan that cools the light [[bulb]] valve, and a projection lens for projecting light modulated by the light [[bulb]] valve, and wherein a first cooling wind path provided by the first cooling fan and a second cooling wind path provided by the second cooling fan are substantially independent of each other, and the second cooling fan also cools an electric power source of the display unit.

Please add the following new paragraph on page 6, before line 10:

Fig. 9 is a schematic view showing a cross section of a variation of the display unit of Figs. 3-8.

Please replace the paragraph beginning on page 6, line 20 with the following amended paragraph:

Fig. 1 is perspective views showing an outward appearance of a projection type display unit according to an embodiment of the invention, in which Fig. 1a shows a front side of the

projection type display unit 1 and Fig. 1b shows a rear side of the projection type display unit 1. Description will be given hereinafter with a liquid crystal panel used as a light valve.

Please replace the paragraph beginning on page 9, line 9 with the following amended paragraph:

In addition, the optical engine 6 comprises an illumination optical system (not shown), by which light from the light source 5 being illumination means is irradiated on the liquid crystal panels 9, the liquid crystal panels 9 that performs light intensity modulation, in which light irradiated by the illumination optical system is transformed into concentration of light every pixel according to a picture signal, to form an optical image, and the projection lens 8 that constitutes projection means for enlarging and projecting the optical image. In Fig. 2, the optical engine 6 uses three liquid crystal panels 9 as a light valve.

Please add the following new paragraph on page 19 before line 16:

A variation of the display unit is exemplified in the cross-sectional view shown schematically in Fig. 9. In Fig. 9, the sirocco fan 10 is arranged with air intake port 10a thereof above the liquid crystal panels 9 built in the optical engine 6. Arranged below the liquid crystal panels 9, an air intake duct 7 guides wind, drawn by fan 10, for cooling the liquid crystal panels 9. The air intake duct 7 is connected to outside from a side of the projection type display unit 1 and serves to guide an air outside the projection type display unit 1 to the liquid crystal panels 9 built in the optical engine 6.